

The Gap Between Site Capacity and Recycling Supply

The attached excerpts from the appellant's proof of evidence to appeal reference APP/U3100/A/10/2125146 of September 2010 in relation to the installation of a recycled aggregates plant at Dix Pit, Stanton Harcourt provide an assessment of the difference between potential site capacities and actual construction, demolition and excavation (CDE) waste recycling capacities. The maximum available CDE waste recycling capacity in Oxfordshire is set out and then an analysis is made as to how much recycled material is actually being produced. This is done on the basis of where there is local knowledge of the sites. It does not therefore include all of the available sites.

This analysis shows a difference of about 35% between potential site capacities and actual recycling levels. (737,000 tonnes per annum = maximum capacity and 547,000 tonnes per annum = actual capacity).

This evidence was unchallenged by the County Council at the appeal inquiry and was accepted by the Planning Inspector.

Erring on the side of caution, a 30% figure is therefore assumed in the representations on the Oxfordshire Minerals and Waste Local Plan Part 1 – Core Strategy Proposed Submission Document relating to this issue.

This is a conservative figure, as is demonstrated by the attached extracts from the Essex Local Aggregates Assessment (LAA) which concluded that the difference between recycled aggregate levels and capacity was as much as 64%. (i.e. recycled aggregate production was 46% of total capacity – see page 68 of extract from Essex LAA attached).

TOWN AND COUNTRY PLANNING ACT 1990

APPEAL BY MR C. SHEEHAN

AGAINST

**THE REFUSAL OF PLANNING PERMISSION FOR APPLICATION NO.:
09/0330/P/CM**

**FOR INSTALLATION AND USE OF PROCESSING PLANT FOR MAKING
RECYCLED AGGREGATE FROM CONSTRUCTION AND DEMOLITION WASTE**

**AT CONTROLLED RECLAMATION LTD, DIX PIT,
STANTON HARCOURT, OXFORDSHIRE**

PROOF OF EVIDENCE

OF

**SUZI COYNE, BA HONS, DIP UP, MRTPI, MIQ
ON BEHALF OF THE APPELLANT**

Inquiry Date: 21st September 2010

Inspectorate Ref: APP/U3100/A/10/2125146/NWF

- 5.2.26 Furthermore when considering new aggregate guidelines published since the RSS was prepared, the requirement for Oxfordshire would be the same if not slightly higher.
- 5.2.27 The National and regional guidelines for aggregates provision in England 2005-2020 published in June 2009, which according to the government guidance on the abolishment of regional strategies are to be taken into account in making planning decisions (see paragraph 3.5.4 earlier in my evidence) identify a requirement for the provision of alternative materials of 130 million tonnes within the South East Region over the period 2005 to 2020, which equates to 8.125 mtpa.
- 5.2.28 The guidelines indicate at paragraph 3 that the sub-regional apportionment of this figure is the responsibility of the regional assemblies, and in future responsible regional authorities, taking into account advice from the mineral planning authorities (MPAs) and the regional aggregates working party (RAWP). (A copy of the guidelines is at **Appendix 14**).
- 5.2.29 This task of sub-apportioning recycled and secondary aggregate provision for the South East was done as part of the preparation of the RSS, and it is evident from former RSS policy M2 that Oxfordshire's share of the total quantity of secondary and recycled aggregate to be used in the South East amounts to 11.4% of the total to be achieved. (The individual apportionments identified in the policy total to 7.9 mtpa). Applying this same percentage to the 2005 to 2020 guidelines requirement for alternative materials of 8.125 mtpa, Oxfordshire's apportionment would therefore now amount to 926,000 tpa.

Maximum Aggregate Recycling Capacity in Oxfordshire

- 5.2.30 Table 5.1 below shows an assessment of the existing maximum capacity of C&D waste recycling sites within the county, as agreed with the County Council. (Copies of the relevant supporting information for the sites could be made available to the inspector if required).

Table 5.1: Maximum C&D Waste Recycling Capacity in Oxfordshire at August 2010

MWDF No.	Site	Operator	Capacity tpa	Time Frame
001	Shipton Hill, Fulbrook	Hickman Bros.	¹ 7,000	Perm.
002	Prospect Farm	Chilton Waste	43,000	2022
004	Slape Hill Quarry	Sheehan	55,000	2014
005	Playhatch Quarry	Grabloader	65,000	Perm.
008	New Wintles Farm	Mckenna	110,000	Perm.
009	Worton Farm	M&M	48,000	Perm.
013	Ewelme No. 2	Grundons	¹ 20,000	2016
028	Gill Mill Quarry	Smiths	³ 120,000	2021
103	Lakeside Industrial Estate, Standlake	WJ Wyatt	25,000	Perm.
114	Appelford Sidings	Hanson	200,000	Perm.
118/247	Tubney Wood/Upwood Park	Hills	8,000	2030
121	Old Brickworks Farm	Miller	40,000	2017
133	Milton Road, Bloxham	Smiths (Blox)	20,000	Perm.
142	Sandfields Farm,	KJ Millard	4,000	Perm.
145	Ferris Hill Farm	Matthews	4,000	Perm.
184	Eyres Lane, Ewelme	Hazell	3,000	Perm.
229	Shellingford Quarry	Multi Agg	15,000	2019
235	Peashell Farm	AM Robey	³ 5,000	2010
256	Hundridge Farm, Ipsden	GD Parker	5,000	Perm.
	Total		797,000	
	Shortfall to meet recycled aggregate requirement		103,000	

¹ Includes wastes other than C&D.

² Resolution to grant planning permission. Decision notice not yet issued.

³ Permission expires 31 Dec 2010. There is no application to extend the end date.

5.2.31 The table shows that there is an existing (i.e. August 2010) maximum capacity (which includes the appellant's Slape Hill site that the appeal site is proposed to replace) of about 797,000 tpa, and therefore a minimum shortfall in capacity of 103,000 tpa. This figure also includes an element of topsoil recycling, which I estimate to be in the order of about 50,000 tpa. The total shortfall in capacity to meet the requirement for recycled aggregate is therefore about 150,000 tpa.

- 5.2.32 I should note in passing that there is also an element of PFA (pulverised fuel ash) in the county, which the County Council have identified as a secondary aggregate with a capacity of about 140,000 tpa. However, I consider it very doubtful that this material should count towards the apportionment requirement. It is a very difficult substance to handle, hazardous to health, requiring special protective measures and a waste permit, so the options for its use are extremely limited. Reflecting the nature of the waste the Environment Agency furthermore categorise it as commercial and industrial (C&I) waste not C&D waste.
- 5.2.33 In addition site 114, Appleford Sidings, is actually a transfer site for spent railway ballast brought in by rail. Much of the material is taken out again by rail to be used elsewhere in the country and, as it is a highly contaminated product high in oil and polycarbons, it is not suitable for incorporation within modern construction applications, which require all materials to be certificated and free of contaminants and pollutants.
- 5.2.34 In the absence of the appellant's site at Slape Hill in 2015 and other existing capacity, which is based on temporary permission and will have expired by then, the sites that would still be permitted (assuming no further permissions are granted) at 2015 amount to about 737,000 tpa, as Table 5.2 below demonstrates. (The sites and individual capacities have been agreed with the County Council. Copies of the relevant supporting information for the sites could be made available to the inspector if required).

Table 5.2: Maximum C&D Waste Recycling Capacity in Oxfordshire at 2015

MWDF No.	Site	Operator	Capacity tpa	Time Frame
001	Shipton Hill, Fulbrook	Hickman Bros.	7,000	Perm.
002	Prospect Farm	Chilton Waste	43,000	2022
005	Playhatch Quarry	Grabloader	65,000	Perm.
008	New Wintles Farm	Mckenna	110,000	Perm.
009	Worton Farm	M&M	48,000	Perm.
013	Ewelme No. 2	Grundons	20,000	2016
028	Gill Mill Quarry	Smiths	120,000	2021
103	Lakeside Industrial Estate, Standlake	WJ Wyatt	25,000	Perm.
114	Appleford Sidings	Hanson	200,000	Perm.
247	Upwood Park	Hills	8,000	2030
121	Old Brickworks Farm	Miller	40,000	2017
133	Milton Road, Bloxham	Smiths (Blox)	20,000	Perm.
142	Sandfields Farm	KJ Millard	4,000	Perm.
145	Ferris Hill Farm	Matthews	4,000	Perm.
184	Eyres Lane, Ewelme	Hazell	3,000	Perm.
229	Shellingford Quarry	Multi Agg	15,000	2019
256	Hundridge Farm, Ipsden	GD Parker	5,000	Perm.
	Total		737,000	
	Shortfall to meet recycled aggregate requirement		163,000	

5.2.35 This means that about 160,000 tpa is actually needed as a minimum, or about 210,000 tpa when taking into account the fact that the figure includes topsoil recycling. This is a significant volume of new capacity to find.

Actual Aggregate Recycling Capacity in Oxfordshire

5.2.36 There is nevertheless a further important factor to consider, which is that the requirement of achieving use of specific quantities of secondary aggregate and recycled materials is not necessarily met by identifying the capacities of the available sites, as it is unlikely that all of these facilities will for various reasons at

any given time be operating to full capacity. I know this to be the case from knowledge of many of my clients' sites, and from discussion with planning colleagues who manage other sites. For example:

- Old Brickworks Farm is not operational and has never recycled any material at any significant quantities.
- Worton Farm is currently recycling about 25,000-30,000 tpa. The site capacity is based on the possibility that more waste might be attracted to the site, both through more skip waste collections and in bulk.
- Playhatch Quarry is currently only recycling about 35,000 tpa, as the operators are in the process of establishing their business. The site is not owned by the operators and the lease may not be renewed to them.
- Whilst there is a new permission at New Wintles Farm for increased throughput, actual existing levels are at about 85,000 tpa and new environmental permitting regulations (April 2010) mean that the site is actually likely to have to reduce to 75,000 tpa to comply with the terms of a standard permit.
- Gill Mill currently recycles about 27,000 tpa. The proposed new capacity of 120,000 tpa is based on being able to attract those volumes of waste into the site. The operators do not currently manage that level of waste.
- The Lakeside Industrial Estate site at Standlake has been subsumed within a wider site now owned by Ethos, which is subject to enforcement action and is no longer operating.
- There is very little if any activity at Hundridge Farm and no crushing of material is permitted on the site.
- The quantity given for Ewelme is the skip waste element of the facility and the proportion of inert waste (suitable for aggregate recycling) would only amount to about a third of this.

5.2.37 Table 5.3 below shows the position regarding what I consider to be actual recycling levels. (Copies of supporting information in relation to the sites listed above and where figures in Table 5.3 differ from those in Table 5.1 are at **Appendix 19**). In reality this means a shortfall of at least 350,000 tpa to meet the requirement for recycled aggregate provision in the County. This equates to a shortfall of 39% or Oxfordshire meeting only 61% of its apportionment. When

accounting for the element of topsoil recycling, the actual capacity shortfall is as much as 400,000 tpa, and Oxfordshire is only meeting 54% of its apportionment.

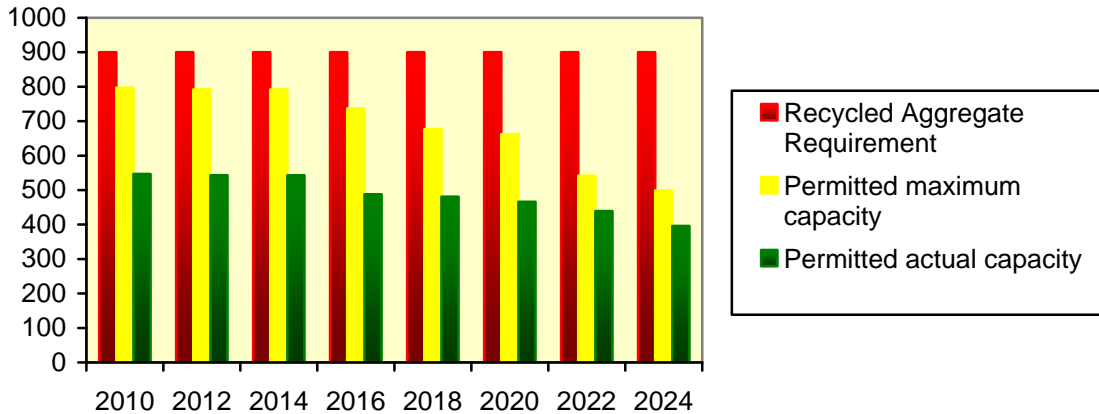
5.2.38 On the basis that an aggregate recycling plant at full production can only produce 100,000 tonnes per annum and assuming an actual 75% capacity is achieved, this demonstrates the need for an additional minimum of five new plants in addition to the appeal scheme - that is five plants altogether - to be set up within Oxfordshire if the aggregate recycling requirement is to be met.

Table 5.3: Actual C&D Waste Recycling Capacity in Oxfordshire at August 2010

MWDF No.	Site	Operator	Capacity tpa	Time Frame
001	Shipton Hill, Fulbrook	Hickman Bros.	7,000	Perm.
002	Prospect Farm	Chilton Waste	43,000	2022
004	Slape Hill Quarry	Sheehan	55,000	2014
005	Playhatch Quarry	Grabloader	35,000	Perm.
008	New Wintles Farm	Mckenna	85,000	Perm.
009	Worton Farm	M&M	30,000	Perm.
013	Ewelme No. 2	Grundons	7,000	2016
028	Gill Mill Quarry	Smiths	27,000	2021
114	Appleford Sidings	Hanson	200,000	Perm.
118/247	Tubney Wood/Upwood Park	Hills	8,000	2030
133	Milton Road, Bloxham	Smiths (Blox)	20,000	Perm.
142	Sandfields Farm	KJ Millard	4,000	Perm.
145	Ferris Hill Farm	Matthews	4,000	Perm.
184	Eyres Lane, Ewelme	Hazell	3,000	Perm.
229	Shellingford Quarry	Multi Agg	15,000	2019
235	Peashell Farm	AM Robey	4,000	2010
	Total		547,000	
	Shortfall to meet recycled aggregate requirement		353,000	

5.2.39 Graph 1 below depicts the contents of Table 5.1 and 5.3 compared to the recycled aggregate requirement and shows just how considerable the shortfall is.

Graph 1: Permitted C&D waste recycling capacity compared to recycled aggregate requirement.



The Need for Increased C&D Waste Recycling

5.2.40 The requirements of former RSS Policy M2 were reflected in the RSS waste policies, which set challenging targets for the more sustainable management of waste. RSS Policy W5 identified targets for recovery (or landfill diversion) of all waste of 71% in 2010 rising to 86% by 2025. As a component of the W5 targets RSS Policy W6 then specified targets for the recycling (and composting) of the individual waste streams. These required that 50% of C&D waste should be recycled by 2010 rising to 60% by 2025.

5.2.41 As with the secondary aggregates and recycled aggregate requirement for Oxfordshire I consider that these former RSS targets are the most appropriate figures against which the need for C&D waste recycling capacity should be assessed, because they have been appropriately examined through the statutory process, and there are no other replacement figures emerging to which weight can be attached.

5.2.42 In addition there is in any event the minimum target of 70% by 2020 as required by Article 11 of the Revised Waste Framework Directive. (See paragraph 5.2.10 of my evidence and **Appendix 18**).

5.2.43 In order to ascertain what these targets mean in terms of volumes, it is necessary to determine what the total waste arisings are. Section 4.7 of the County Council's Minerals and Waste Annual Monitoring Report 2009 identifies two figures for this purpose. The first is a figure of 886,908 tonnes for total C&D waste managed in Oxfordshire, identified in Table 5 and paragraph 4.7.4 of the report (see relevant extracts at **Appendix 20**). A footnote to the paragraph states that this figure is sourced from the Environment Agency's RATS database for 2007. The second figure is 1.44 mtpa, which was the assessment of a study carried out for the County Council by ERM in January 2008.

5.2.44 I do not agree with the statement further on in paragraph 4.7.4 of the Annual Monitoring Report that the Environment Agency data is the more reliable figure of the two figures. RATS stands for Regis Attached Tonnage System, which is the Environment Agency database into which returns data from permitted waste facilities is recorded. It therefore only accounts for those sites that have waste permits. The vast majority of aggregate recycling facilities are, however, currently exempt from permitting requirements and are not required to provide waste returns to the Environment Agency. I know that to be the case with at least the following sites:

- Slape Hill
- Playhatch (There is a waste permit but it only relates to soil recycling)
- New Wintles Farm
- Worton Farm
- Gill Mill
- Appleford Sidings

This therefore accounts for about 400,000 tpa of managed C&D waste (on the basis of Table 5.3) that is not accounted for in the Environment Agency figure. There are in addition a number of landfill sites that are also not controlled by waste permits, which is another element of waste that is not accounted for within the RATS system.

5.2.45 On this basis I consider that the ERM figure is a much more accurate estimate of C&D waste arisings, and that in light of the adopted RSS target at least 720,000 tpa of C&D waste should be being recycled at this point in time.

5.2.46 Whilst Table 5.1 indicates that C&D waste recycling capacity is higher than the requirement of 720,000 tpa, the analysis at paragraphs 5.2.36 to 5.2.39 shows that capacity does not equate to actual recycling levels. I consider that to achieve this level of recycling of 720,000 tpa an overall capacity figure in the order of 1,000,000 tpa is required, i.e. a difference of broadly 25 - 30%, to take account of the fact that there will also be factors that prevent sites from always working to full capacity.

5.2.47 If the RSS targets are not to be relied on the alternative European target of 70% of C&D waste to be recycled and recovered by 2020 would equate to a minimum requirement of 1,008,000 tpa for Oxfordshire.

5.2.48 The Council's Annual Monitoring Report of December 2009 (see relevant extracts at **Appendix 20**) supports my view that permitted recycling capacity does not equate to actual recycling levels, and that there is a significant shortfall in meeting waste recovery and recycling targets. It says at paragraph 4.7.3 that 28% of C&D waste is recycled and 29% recovered (57% diverted from landfill in total).

The Forward Planning Response to Meeting the Shortfall

5.2.49 There is furthermore no indication when this shortfall in capacity in Oxfordshire is to be planned for.

5.2.50 The Council's Annual Monitoring Report of December 2009 (see relevant extracts at **Appendix 20**) explains at chapter 3 why the County Council do not have an up-to-date Minerals and Waste Development Scheme, and that in the meantime it is using a draft scheme, which is at Appendix 1 to the Report. The scheme at Appendix 1, however, only refers to the SCI (Statement of Community Involvement) and to the Core Strategy. A footnote explains that decisions on the need for a site allocations DPD (Development Plan Document) will be made when preparation of the Core Strategy is further advanced.

Essex County Council

Replacement Minerals Local Plan

**CED – 05 Essex County Council, Southend-on-Sea
Borough Council and Thurrock Council -
Local Aggregate Assessment for Greater Essex**

June 2013



Essex County Council

10 SECONDARY AND RECYCLED AGGREGATE

10.1 Introduction

Along with 'primary' aggregate, described in Section 4.2 as being minerals extracted directly from the ground, there are also 'secondary' and 'recycled' aggregates. 'Recycled' aggregates are those derived via methods analogous to the traditional idea of recycling. Examples include the re-use of brick and concrete obtained from construction and demolition work being re-processed to be used in new developments, rather than being disposed of in a landfill site. 'Secondary' aggregates are created as a by-product of a construction or industrial process. Examples include power station ash resulting from combustion (fly ash) which can be turned into bricks and cement, and slag from iron smelting which can be manufactured into mineral wool and subsequently be used as a heating pipe insulator. A large amount of recycled and secondary aggregate is processed on redevelopment and construction sites. These can be stand-alone permanent facilities on industrial estates or temporary facilities co-located with existing quarries, landfill sites and recycling sites that remain operational until such a time that quarrying or landfilling ceases.

The benefits for maximising the use of both secondary and recycled aggregate are two-fold. Firstly, the use of these aggregates reduces the need to extract primary material in the first instance, leading to a reduction in the need for quarry sites. Secondly, the re-use of aggregate reduces the amount of waste that needs to be disposed of, reducing the need for landfill sites. Such a reduction in the need for quarry and landfill sites has clear economic, environmental and social benefits. Essex County Council, Southend-on-Sea and Thurrock Council positively encourage the re-use and recycling of Construction, Demolition and Excavation (CDE) waste through development plans and operation policies. Through the Essex MLP, the emerging Southend-on-Sea Development Management DPD and Thurrock Minerals and Waste Development Plan Document (MWDPD), each authority will enable and encourage the construction industry and mineral industry to invest in creating and maintaining an effective network of aggregate recycling facilities across Greater Essex to meet demand. However this should not be taken to mean that increasing the importation of waste into Essex or Thurrock from outside these areas would be acceptable.

10.2 Recycled Aggregate Throughput and Capacity

Policies in the existing Minerals and Waste Local Plans for Essex, Southend-on-Sea and Thurrock encourage the use of alternative aggregate sources and the development of facilities for the recycling of mineral wastes, and construction and demolition waste (Essex Minerals Local Plan Policy MLP5, and Essex and Southend-on-Sea Waste Local Plan Policy W7D, and Thurrock Core Strategy Policies CSTP29 and CSTP31). Southend-on-Sea also seek to encourage the re-use and recycling of construction waste through its emerging Development Management DPD. However the supply of recycled aggregate is largely an assumed supply, due in part to the difficulty that Essex County Council, Southend-on-Sea and Thurrock Council have had in obtaining existing throughput figures. This is particularly true for secondary aggregate where no figures exist. The 'National and Sub-National Guidelines for Aggregate Provision in England 2005 – 2020' document proposes that the East of

England region should provide 117mt of alternative aggregate materials between 2005 and 2020, equating to 7.8mt a year. This is equivalent to 31% of the region's total aggregate supply, so the re-use of recycled and secondary aggregate is expected to be a major feature of mineral supply. There is however no apportionment of the 117mt figure to individual Mineral Planning Authorities in the region.

10.2.1 Total Capacity of Recycled Aggregate Facilities in Essex and Southend-on-Sea

The following three tables detail the capacity of CDE (Aggregate) Recycling sites within Essex and Southend-on-Sea which process recycled aggregate as well as screen soils associated with this type of aggregate.

TABLE 24: TOTAL AGGREGATE RECYCLING FACILITIES – ALL TYPES

Number of Facilities	Total Permitted Capacity
35	1,737,992t

Source: Essex County Council and Southend-on-Sea Borough Council Capacity Gap Report Update – Revised 2011

Note: Of the 35 total facilities, ten have had their contribution to Total Permitted Capacity calculated via information contained in their EA permitted license whilst a further four have had to have been omitted entirely due to the absence of capacity information.

Of this total capacity, approximately 60% is permanent capacity with the remaining 40% being located in temporary facilities on existing mineral sites.

TABLE 25: AGGREGATE RECYCLING FACILITIES – OPERATIONAL

Number of Facilities	Total Permitted Capacity
28	1,370,492t

Source: Essex County Council and Southend-on-Sea Borough Council Capacity Gap Report Update – Revised 2011

Note: Of the 28 facilities, ten have had their contribution to Total Permitted Capacity calculated via information contained in their EA permitted license whilst a further two have had to have been omitted entirely due to the absence of capacity information.

A comparison of Table 24 with Table 25 suggests that 78.85% of total permitted capacity is operational.

TABLE 26: AGGREGATE RECYCLING FACILITIES – NON OPERATIONAL RECYCLING FACILITIES WITH PLANNING PERMISSION

Number of Facilities	Total Permitted Capacity
4	102,500t

Source: Essex County Council and Southend-on-Sea Borough Council Capacity Gap Report Update – Revised 2011

Note: Of the four facilities, two have no stated planning permitted or EA licensed capacity and have been omitted from the Total Permitted Capacity calculation.

TABLE 27: AGGREGATE RECYCLING FACILITIES –PERMITTED SINCE FEB 2011

Number of Facilities	Total Permitted Capacity
3	265,000t

Source: Essex County Council and Southend-on-Sea Borough Council Capacity Gap Report Update – Revised 2011

As stated previously, 40% of existing recycling capacity is of a temporary nature and therefore there will be reductions in total permitted capacity in CDE recycling during the period up to 2029 as temporary permissions expire. A ‘capacity gap’ is estimated to arise from 2020/21 onwards between the permitted capacity of CDE recycling facilities and the volume of CDE waste which must be recycled. Consequently, additional CDE recycling facilities, amounting to a capacity of approximately 0.45mt, will be needed in the Plan Area to achieve increased recycling and re-use of material from this waste stream up to 2029.

The EU Framework Directive requires waste planning authorities, which includes Essex and Thurrock, to plan on the basis that over time there should be a significant reduction in the amount of CDE waste that is sent to landfill. This is the key policy driver behind increasing the proportion of CDE waste that must be reused or recycled. At this current time, all district, borough and city authorities within Essex have aggregate recycling facilities within their administrative area with the exception of Castle Point borough. A list of aggregate recycling facilities within Greater Essex can be found in Appendix 3

10.2.2 Throughput of Recycling Aggregate Facilities in Essex and Southend-on-Sea

The ‘throughput’ is a measure of the amount of recycled aggregate that passes through the recycling facilities. This differs from the capacity which is the total amount of recycled aggregate that could be processed at recycling sites given an infinite supply. For reasons explained below, the throughput at aggregate recycling sites has been estimated. This has been done through analysing surveys that a proportion of mineral site operators were able to return, and then extrapolating the findings across the total number of aggregate recycling facilities that are known to exist in Essex. Essex does not have the legal jurisdiction to stipulate that these surveys be completed. Of the 28 recycling CDE sites known to exist, nine operators returned a survey in the latest round in 2010, equating to 32.1% of the total known sites.

A further issue is that the throughput of aggregate recycling facilities does not necessarily equate to the production of recycled aggregate. The suitability of material for different uses will depend on its characteristics and as such this does not necessarily mean it can substitute for primary aggregate.

The total throughput from these nine aggregate recycling facilities totalled 0.189mt. Through planning applications and information received from the Environment Agency it was possible to ascertain the total capacity of these nine sites and it was found that the throughput of these nine sites was 46% of their total capacity. This estimate of recycled aggregate throughput being 46% of total capacity was applied to all 28 known operational recycling sites, providing an estimated total recycled aggregate production figure for Essex of 0.678mtpa out of a total capacity of 1.47mtpa.

This figure of 0.678mtpa does not take into account recycled aggregate that is processed by mobile facilities that can be temporarily located in close proximity to demolition sites. A Communities and Local Government report entitled 'Survey of Arisings and Use of Alternatives to Primary Aggregates in England: Construction, Demolition and Excavation Waste 2005' states that an additional figure equating to 19.8% of fixed site throughput can be estimated for the contribution to total throughput made by mobile sites. Given the estimate of 0.678mt for the 28 fixed aggregate recycling sites in Essex, an additional 19.8% results in a total recycled aggregate throughput of 0.812mt in 2010.

This methodology was also followed in 2009 where a total recycling aggregate throughput of 0.842mt was estimated. The 2010 and 2009 figures exceed those recorded in the preceding two years. In 2007 recycled aggregate throughput was recorded as 0.48mt whilst in 2008 it was 0.42mt. The large discrepancy can be explained by the fact that these figures represent only those sites where the operator returned their survey. No extrapolation was carried out across those sites which did not return a survey in order to estimate a total recycled aggregate throughput across Essex and Southend-on-Sea.

10.2.3 Capacity and Throughput of Recycled Aggregate Facilities in Thurrock

Within Thurrock there are five authorised sites which process recycled aggregate as well as screen soils associated with this type of aggregate. Of these five sites, three are associated with mineral and landfill sites and are thus of a temporary nature, and two are 'permanent' sites. However one of the latter is within an area proposed for comprehensive redevelopment and thus is likely to be lost at some time in the future. There are no non-operational sites. These facilities are also detailed in Appendix 3.

It should be noted that although the planning permissions for these sites do not impose capacity limitations by reference to tonnages, capacities are in some instances limited by reference to maximum vehicle movements. It is understood from those operators who have volunteered information that total throughput is likely to be substantially less than total permitted capacity. The Thurrock Waste Management Capacity Needs Assessment Update 2010 indicated that Thurrock had an oversupply of CDE recycling capacity to meet its own waste arisings. It was forecast that Thurrock would fall short of capacity before 2015/16 but that this could be addressed with one or two new or retained sites. Since then the life of two of the temporary facilities has been extended such that this capacity shortfall will probably not occur as envisaged. Furthermore any undersupply would be reduced by the extent of recycling carried out on development sites by mobile crushers and screens. This latter type of capacity will fluctuate markedly depending on the number and type of development sites within Thurrock at any one time with marked results on total capacity. In theory the provision made for primary aggregate provision could be reduced to a degree to reflect the availability of recycled materials. It is noteworthy that provision of the latter is likely to be greater than the regional apportionment for sand and gravel of 0.14mtpa. However the CDE recycling capacity from which this recycled material is derived is 'fueled' to a large degree by imports of waste, with London being in close proximity. Thus for Thurrock it would be inappropriate to reduce primary aggregate provision as perhaps suggested by the NPPF when the supply of recycled material is underpinned by imports of waste.

10.3 Essex and Southend-on-Sea Waste Capacity Gap Report, 2012

An update to the Essex and Southend-on-Sea Waste Capacity Gap Report (Revised) 2011 is currently being prepared which will improve the evidence with regard to aggregate recycling facilities. Whilst its production will come too late to inform this iteration of the LAA, the findings will be included within the next LAA, whilst the Essex Waste Capacity Gap Report 2012 will also be available on the Essex County Council website upon its completion.

10.4 Conclusion

Whilst it can be certain that recycled and secondary aggregate reduces the amount of primary aggregate required to facilitate development, the data currently available is extremely raw and is not considered to be suitably robust to enable a recycling target to be set. However, the emerging REMLP demonstrates a strong support for aggregate recycling, with Policy SS5: Creating a network of aggregate recycling facilities stating that proposals for new aggregate recycling facilities will normally be supported in a list of stated locations provided they are environmentally acceptable and in accordance with other policies in the development plan.

The Southend-on-Sea Core Strategy outlines broad locational criteria for recycling aggregates and secondary material development proposals.

Within Thurrock, Policy CSTP31 of the Adopted Core Strategy and Policies for the Management of Development DPD indicates that the Council will encourage the use of facilities for recycling aggregate or secondary materials, or processing of such materials, as alternatives to land won aggregate. Proposals on unallocated sites which come forward must meet criteria to be set out in the MWDPD. Policy CSTP32 indicates that permanent authorised aggregate recycling capacity will be safeguarded from non-mineral related development unless the proposals meet criteria to be outlined in the MWDPD and / or are identified for alternative use.